INTERNATIONAL SEARCH REPORT

Internatio ilication No

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H03J7/22 H03J7/06 H03J1/00								
According to International Patent Classification (IPC) or to both national classification and IPC								
	SEARCHED currentation searched (classification system followed by classification	On symbols	·					
IPC 7	H03J H04N	on aynibolay	·					
Documentat	ion searched other than minimum documentation to the extent that s	such documents are included in the fields se	arched					
	ata base consulted during the international search (name of data ba	se and, where practical, search terms used)					
EPO-In	ternal, PAJ							
C. DOCUMENTS CONSIDERED TO BE RELEVANT								
Calegory °	Citation of document, with indication, where appropriate, of the rel	Relevant to claim No.						
A	US 5 552 838 A (SUIZU KATSUTO) 3 September 1996 (1996-09-03) figure 8		1-10					
Α	US 6 421 099 B1 (OH JI-SUNG) 16 July 2002 (2002-07-16) column 5, line 13 - line 16; figu	1–10						
A	US 5 034 819 A (TSUKAGOSHI MASAHI 23 July 1991 (1991-07-23) figure 1	1–10						
Α	US 5 650 830 A (LEE DONG HA) 22 July 1997 (1997-07-22) column 4, line 26 - line 45		1-10					
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Further documents are listed in the continuation of box C. Patent family members are listed in annex.								
	legories of cited documents :	"T" later document published after the Inter or priority date and not in conflict with	mational filing date					
consid	nt defining the general state of the art which is not ered to be of particular relevance locument but published on or after the International	cited to understand the principle or the invention	ory underlying the					
filing date Cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone								
which is clied to establish the publication date of another clation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the								
other r	ent referring to an oral disclosure, use, exhibition or neans nt published prior to the International filing date but	document is combined with one or mo ments, such combination being obviou in the art.	re other such docu- is to a person skilled					
later th	an the priority date claimed	& document member of the same patent family						
	actual completion of the international search	Date of mailing of the international search report						
	2 December 2003	19/12/2003						
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2		Authorized officer						
NL – 2280 HV Rijswijk Tel. (+31−70) 340−2040, Tx. 31 651 epo nl, Fax: (+31−70) 340−3016		Peeters, M						

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